

Background -The Global Crisis

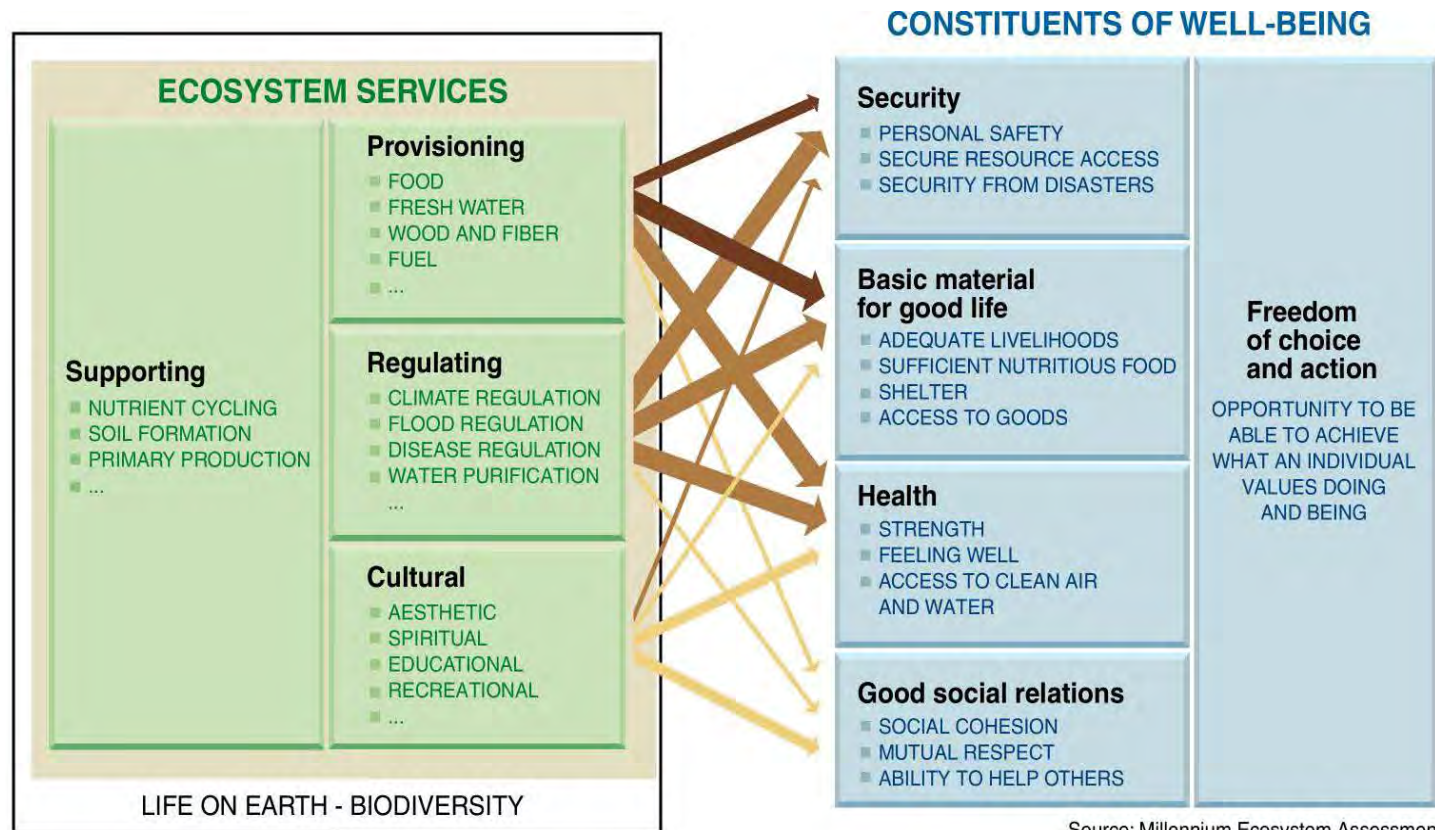


Millennium Ecosystem Assessment

Ecosystem Services



Consequences of Ecosystem Change for Human Well-being



Source: Millennium Ecosystem Assessment

ARROW'S COLOR
Potential for mediation by socioeconomic factors

- Low
- Medium
- High

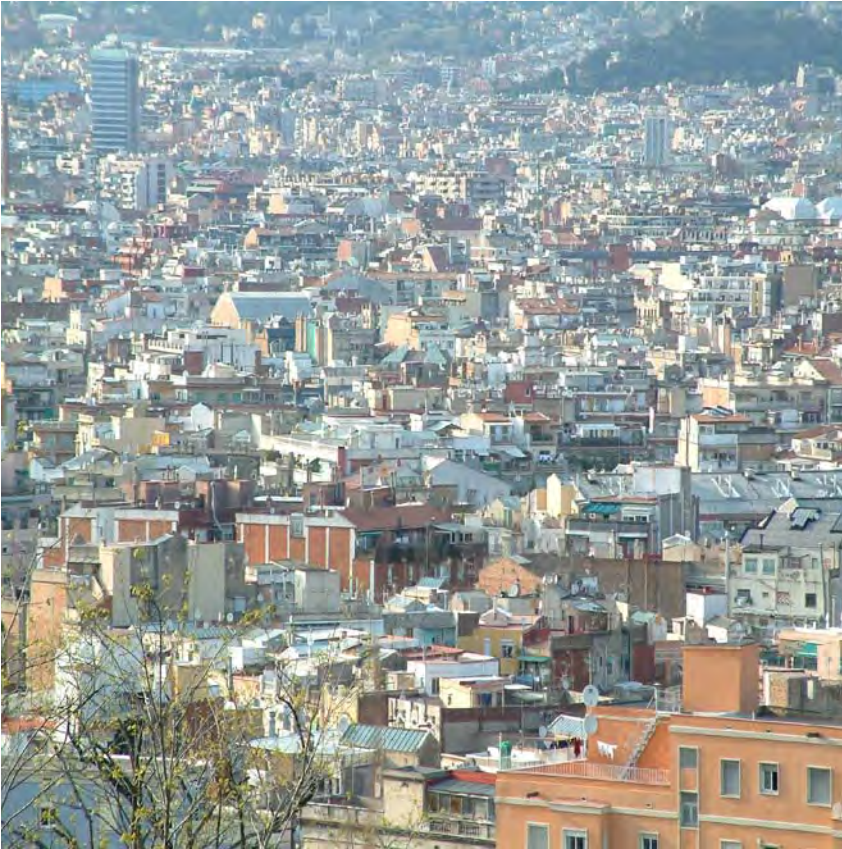
ARROW'S WIDTH
Intensity of linkages between ecosystem services and human well-being

- Weak
- Medium
- Strong

Status of Provisioning Services

Service		Status
Food	crops	↑
	livestock	↑
	capture fisheries	↓
	aquaculture	↑
	wild foods	↓
Fiber	timber	+/-
	cotton, silk	+/-
	wood fuel	↓
Genetic resources		↓
Biochemicals, medicines		↓
Fresh water		↓

Further...



- Decline in regulating and cultural services
(air quality regulation, climate regulation, water erosion, purification and waste treatment, disease and pest regulation, pollination, spiritual religious and aesthetic values)

Finally:



- Demand for food crops to grow by 70-85 by 2050
- Water withdrawals up by 30-85%
- Food security will not be achieved by 2050
- Child under-nutrition will be difficult to eradicate
- Plant species reduced by 10-15%

The context for biodiversity conservation



New approach

- Nature and society are interconnected
- Holistic approach taking into account social, economic, ecological and cultural considerations
- Multiple causal agents for current crisis (economics, population growth, social dynamics, poverty etc)
- Sustainable use now a key component of conservation, with focus on enhancing sustainability



The World Summit on Sustainable Development

Johannesburg Platform for Action.

- Priority areas for action (Water, Energy, Health, Agriculture and Biodiversity)



Operational framework



International Conventions
and Policy Framework
e.g.

- The Convention on Biological Diversity
- CITES
- International Plant Protection Convention
- WHO
- Others

Examples

- Rio Conventions 1992

Convention on Biological Diversity (CBD), Climate Change (UNFCCC) and Desertification (UNCCD)

Three objectives of the CBD (www.biodiv.org)

- Conservation of biological diversity
- Sustainable use of its components
- Fair access and equitable sharing of benefits arising from use of genetic resources



... CBD Global Strategy for Plant Conservation – 2010 targets...



- (ix) 70 per cent of the genetic diversity of crops and other major socio-economically valuable plant species conserved, and associated indigenous and local knowledge maintained;
- (xi) No species of wild flora endangered by international trade;

...

- (xii) 30 per cent of plant-based products derived from sources that are sustainable managed;
- (xiii) The decline of plant resources, and associated indigenous and local knowledge, innovations and practices that support sustainable livelihoods, local food security and health care, halted.



Millennium Development Goals

- Agreed at the World Millennium Summit 2000 to be met by 2015
- 8 goals addressing hunger, health, poverty, education and environment
www.un.org/millenniumgoals/
- Each one has one or more specific target along with social, economic and environmental indicators

Trends

Emerging trends ---
holistic and
integrated
interventions and
responses



Examples

www.natureandpoverty.org

- IUCN, WWF and Friends of the Earth
- Recognise that people and poverty are at the centre of the environmental crisis
- Alleviate poverty by safeguarding and restoring natural livelihood resources
- How: improve livelihood systems, strengthen civil organisations and influence policy and policy dialogue